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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/619,773

Filing Date: July 15, 2003

Appellant(s): HODGES, JAMES W.

**MAILED** 

JUL 0 2 2007

**GROUP 3600** 

Kristin L. Murphy
For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 11-1-06 appealing from the Office action mailed 7-3-

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### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

## (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

#### (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

## (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

## (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

## (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

## (8) Evidence Relied Upon

4,300,773	JELINEK	11-1981
5,322,299	TERAI	6-1994
6,719,300	FUJINO et al.	4-2004

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## '(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 1, 3-10, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jelinek (4,300,773) in view of Terai (5,322,299).

Jelinek discloses a gasket method of making a gasket comprising a metal base sheet 12 having at least one aperture 18 bound by an edge wherein one or more coined angles 20 (see col. 2,line 18) are formed at the edge and an elastomeric material (silicone rubber) 22 is disposed on the angles to form a sealing bead.

Jelinek does not disclose that a texture is applied to the coined angles. Terai teaches a gasket and method of making a gasket having an elastomer applied to a region of a base sheet. Terai teaches applying a texture 21 at the region the elastomer is to be applied to improve the adhesion (see col. 2, lines 61-65). Regarding claims 13 and 14, Terai teaches the texture can be the addition of a primer 41 to improve adhesion (col. 7, 54-8, 5). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to apply a texture to the coined angles of the base sheet to improve adhesion of the elastomer applied thereto as taught by Terai.

Regarding claim 5, while Jelinek discloses a substantially thin base sheet, Jelinek does not appear to disclose a thickness of 1.0mm. It is not considered inventive to discover the workable or optimum ranges by routine experimentation absent the showing of criticality for such ranges. See In re Aller, 105 USPQ 233, 235 (CCPA 1955). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to make the base sheet 1.0mm thick.

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2. Claims 1, 3, 4, 6-10, and 12-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jelinek in view of Fujino (6,719,300) in view of Terai.

Jelinek discloses a gasket method of making a gasket comprising a metal base sheet 12 having at least one aperture 18 bound by an edge wherein one or more coined angles 20 (see col. 2,line 18) are formed at the edge and an elastomeric material (silicone rubber) 22 is disposed on the angles to form a sealing bead. Jelinek does not disclose the coined angles are defined by a gradual reduction in thickness toward the edge of the sheet. Fujino teaches a gasket having a metal base sheet with an aperture bound by an edge wherein one or more coined angles are formed at the edge and an elastomeric material is disposed on the angles to form sealing beads. Fujino teaches art equivalent shapes (coined angles) used at the edge (see Figs 3I-3III). Figure 3III shows an angle/shape similar to that in Jelinek and figures 3I and 3II show a gradual reduction in thickness. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the coined angles of Jelinek with a coined angle having a gradual reduction in thickness, as such are art equivalent angles as taught by Fujino.

Jelinek does not disclose that a texture is applied to the coined angles. Terai teaches a gasket and method of making a gasket having an elastomer applied to a region of a base sheet. Terai teaches applying a texture 21 at the region the elastomer is to be applied to improve the adhesion (see col. 2, lines 61-65). Regarding claims 13-15, Terai teaches the texture can be the addition of a primer 41 to improve adhesion (col. 7, 54- 8, 5). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to apply a texture to the coined angles of the base sheet to improve adhesion of the elastomer applied thereto as taught by Terai.

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Regarding claims 16-19, neither Jelinek nor Fujino appear to disclose the claimed angles. It is not considered inventive to discover the workable or optimum ranges by routine experimentation absent the showing of criticality for such ranges. See In re Aller, 105 USPQ 233, 235 (CCPA 1955). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to make the angles in the claimed ranges.

3. Claims 1, 3-7, 9, 12, 13, 15-17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujino in view of Terai.

Fujino discloses a gasket comprising a metal base sheet A having at least one aperture bound by an edge wherein one or more angles (see Figs. 3I-3III) defined by a gradual reduction in thickness is formed at the edge and an elastomeric material 7 is disposed on the angles to form a sealing bead. Requiring the angles to be coined is considered a process in a product claim and is given little patentable weight.

Fujino does not disclose that a texture is applied to the coined angles. Terai teaches a gasket and method of making a gasket having an elastomer applied to a region of a base sheet. Terai teaches applying a texture 21 at the region the elastomer is to be applied to improve the adhesion (see col. 2, lines 61-65). Regarding claims 13 and 15, Terai teaches the texture can be the addition of a primer 41 to improve adhesion (col. 7, 54-8, 5). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to apply a texture to the coined angles of the base sheet to improve adhesion of the elastomer applied thereto as taught by Terai.

Regarding claims 5 and 16, 17, and 19, Fujino does not disclose the base has a thickness of 1.0mm or the claimed angles. It is not considered inventive to discover the workable or

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optimum ranges by routine experimentation absent the showing of criticality for such ranges. See In re Aller, 105 USPQ 233, 235 (CCPA 1955). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to make the base with a thickness of 1.0mm and the claimed angles.

#### (10) Response to Argument

#### **B.** 1.

Appellant argues that there is no motivation to combine Jelinek and Terai and that the examiner has used improper hindsight. The examiner disagrees. First, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). And, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In this case, Jelinek discloses the gasket substantially as claimed including a coined lip 20 with angles that increase the surface area at the edge of the base exposed to the elastomeric material 22. However, Jelinek does not appear to disclose the angles include a textured surface. Terai teaches a gasket having an elastomeric material disposed on the base sheet. Terai teaches

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texturing the surface, either by roughening or with a primer, to improve adhesion. This also improves sealing performance (see column 2, lines 61-68). Appellant argues that there is no concern regarding increased adhesion in Jelinek given the seal's position between parts in Jelinek. The examiner disagrees. Appellant's gasket is sandwiched/clamped between components too, as is Terai's. The most reliable connection is always desirable. And, improved connection/adhesion helps prevent separation or displacement during routine handling, assembly, and use. This is the motivation to combine. And, one of ordinary skill in the art seeking to apply an elastomeric material to a base sheet of a gasket would have the knowledge that a textured surface creates a better bond between the two.

#### **B.2.**

Regarding claims 13 and 14, Appellant again argues there is no motivation to combine and that the examiner has used impermissible hindsight. Again, the examiner disagrees because Terai clearly teaches that texturing provides a better bond between the elastomer and base.

Please see paragraph directly above.

Appellant argues that Terai does not teach adding material. The examiner disagrees.

Terai teaches that adding a primer 41 improves the adhesion of the elastomer to the base (see col. 7, line 64-col. 8, line 5). Appellant argues that primer does not produce a "textured" surface because it is shown as smooth. The examiner disagrees. First, it is not exactly clear if the primer would create a "smooth" surface. It likely would result with some dimension. Regardless, "smooth" IS a texture. The term "textured" is not limited to "rough." And, the claim does not require a rough texture. In fact, Appellant's specification states that the "texture" is achieved simply by adding a material (for example, see first sentence of page 5). It appears to be silent as

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to what kind of material. Terai teaches adding a primer, which is a material. Thus, Terai teaches a "textured" surface in as much is supported by Appellant's specification.

C.

Appellant argues that Fujino does not teach an art equivalent to Jelinek's lip 20. The examiner disagrees. Figure 3(III) of Fujino is considered to be equivalent to lip 20 of Jelinek. Appellant argues that the lip of Jelinek is provided at right angles to the bore opening 18. However, Jelinek does not state that they are right angles or that they have to be right angles. Figure 3(III) of Fujino is at the very least, similar to lip 20. Regardless, Fujino clearly teaches equivalent, effective shapes (in Figures 3(I)-3(III)) that can be used when applying an elastomeric material to the base sheet of a gasket. Each of these shapes provides increased surface area around the aperture to increase the bonding strength of the elastomer to the base. One of ordinary skill in the art seeking to apply an elastomer as such a location would have the knowledge of various shapes that would provide an effective, secure connection. This is the motivation to use any of the shapes.

D.

Appellant argues there is no motivation to combine Fujino with Terai. The examiner disagrees. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Fujino discloses the gasket structure substantially as claimed. However,

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Fujino does not appear to disclose that a texture is applied. Terai teaches a gasket having an elastomeric material disposed on the base sheet. Terai teaches texturing the surface, either by roughening or with a primer, to improve adhesion. This is the motivation to combine.

Appellant argues that member 7 of Fujino does not provide a sealing function. This argument is considered unpersuasive. First, none of the claims require a "sealing function" during operation; they only require "an elastomeric material." Regardless, Fujino discloses element 7 as "a rubber elastic seal member" (col. 3, line 25).

Appellant argues Terai teaches away from the combination because the roughened surfaces are only applied to parallel surfaces. The examiner disagrees. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). And, Terai is clearly concerned with improving adhesion between an elastomeric material and a base sheet. Terai does not state the surfaces have to be parallel. These are just shown as examples.

Appellant argues the likelihood of success could only have come from Appellant's own specification. The examiner disagrees. Terai clearly teaches that roughening (i.e. applying texture) to a surface enhances adhesion between materials (see col. 2, lines 61-65).

## (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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